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12	992	98.5	596	3	US-09-863-901-41	Sequence 41, Appl
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14	992	98.5	599	3	US-09-277-716-7	Sequence 7, Appl
15	992	98.5	958	2	US-08-757-046A-5	Sequence 5, Appl
16	992	98.5	958	3	US-09-447-208-5	Sequence 5, Appl
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23	992	98.5	958	3	US-09-746-485A-5	Sequence 5, Appl
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31	992	98.5	1431	3	US-09-863-901-11	Sequence 11, Appl
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ALIGNMENTS

RESULT 1
 US-08-757-046A-7
 ; Sequence 7, Application US/08757046A
 ; Patent No. 5876995
 ; GENERAL INFORMATION:
 ; APPLICANT: Bryan, Bruce
 ; TITLE OF INVENTION: BIOLUMINESCENT ARTICLES OF MANUFACTURE
 ; NUMBER OF SEQUENCES: 14
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Brown, Martin, Haller & McClain
 ; STREET: 1660 Union Street
 ; CITY: San Diego
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 92101-2926
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSEQ Version 1.5
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/757,046A
 ; FILING DATE: 11-25-96
 ; CLASSIFICATION: 435
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/597,274
 ; FILING DATE: 02-06-96
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Seidman, Stephanie L
 ; REGISTRATION NUMBER: 33,779
 ; REFERENCE/DOCKET NUMBER: 6680-105B
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 619-238-0999
 ; TELEFAX: 619-238-0062
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 7:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 591 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; HYPOTHETICAL: NO
 ; ANTI-SENSE: NO
 ; FRAGMENT TYPE:
 ; ORIGINAL SOURCE:
 ; FEATURE:
 ; NAME/KEY: Coding Sequence
 ; LOCATION: 1...588

; OTHER INFORMATION: Recombinant Aequorin AEQ2
 ; PUBLICATION INFORMATION:
 ; AUTHORS: Prasher et al.
 ; TITLE: Sequence Comparisons of Complementary
 ; Patent No. 5876995
 ; TITLE: DNAs Encoding Aequorin Isotypes
 ; JOURNAL: Biochemistry
 ; VOLUME: 26
 ; PAGES: 1326-1332
 ; DATE: 1987
 US-08-757-046A-7

Alignment Scores:

Pred. No.:	2.86e-110	Length:	591
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Percent Similarity:	98.4%	Conservative:	1
Best Local Similarity:	97.9%	Mismatches:	3
Query Match:	98.5%	Indels:	0
DB:	2	Gaps:	0

US-10-811-138-4-X-AT-82 (1-189) x US-08-757-046A-7 (1-591)

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RESULT 2

US-09-447-208-7
; Sequence 7, Application US/09447208
; Patent No. 611386
; GENERAL INFORMATION:
; APPLICANT: Bryan, Bruce
; TITLE OF INVENTION: BIOLUMINESCENT ARTICLES OF MANUFACTURE
; NUMBER OF SEQUENCES: 14
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Heller Ehrman White & McAuliffe
; STREET: 4250 Executive Square, 7th Floor
; CITY: La Jolla
; STATE: CA
; COUNTRY: USA
; ZIP: 92037
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSEQ Version 1.5
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/447,208
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 0909/135,988
; FILING DATE: 08-17-98
; CLASSIFICATION:
; PRIOR APPLICATION DATA:

10/8/11, 138

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Y
tat →

F - TTC, TTT

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346-348

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x 27

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Leu Asp Glu Met Val Tyr Lys Ala Ser Asp Ile Val Ile Asn Asn Leu 569, 99.5%
35 40 45

569
567

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27, 28

1, 73, 79

seq id no: 3 differs by 2-4 nt from prior seq

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Tyr Ala Lys Asn Glu Pro Thr Leu Ile Arg Ile Trp Gly Asp Ala Leu
100 105 110

Phe Asp Ile Val Asp Lys Asp Gln Asn Gly Ala Ile Thr Leu Asp Glu
115 120 125

Trp Lys Ala Tyr Thr Lys Ala Ala Gly Ile Ile Gln Ser Ser Glu Asp
130 135 140

Ser Glu Glu Thr Phe Arg Val Ser Asp Ile Asp Glu Ser Gly Gln Leu
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aagacacAAG cacatGTTG atttCCTCGA catcaatGGA aatggAAAAA tcaccCTCGA 180
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aacaAAACG catcaAGTTT gtgtGAAGC tttCTTGAAG ggatgtggAA tggaaatATGG 300
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tattttcgac aaagatggAA gtggTACAAT cacttGGAC gaatggAAAG cttatggAAA 480
aatctctggT atctctccat cacaAGAAGA ttgtGAAGCG acatttcgac attgcgattt 540

W	TGG
Y	TAT
F	TTC

or

Ser - AGC
Cys - TGC

189
562